

## CLAIMS

1. A dispensing device for a flexible container with a recloseable cap, for products in a pasty state, characterized in that it comprises:
- a cylindrical part fixed to the sealing lip or to the neck of the container,
  - a diaphragm joined to the cylindrical part and containing openings,
  - a cylindrical body in the center of the diaphragm, its cross section being greater than the opening of the container, and
  - a head formed on the end of the cylindrical body, its cross section increasing with distance from the cylindrical body, the greatest cross section of the head being of a diameter approximately equal to the opening of the container,
- and in that the body and the head, which are both joined to the diaphragm, are able to move in the axis of the opening of the container when pressure is exerted on the walls of the container and applied to the diaphragm, between:
- a first or at-rest position of closure, the head closing the opening of the container by means of its part of greatest cross section when no pressure is being exerted, and
  - a second or limit position of closure, the cylindrical body whose diameter is greater than the opening pressing against the edge of the latter, thus closing the opening because of the pressure,
- the successive positions taken up by the cylindrical body and the head during their intermediate travel between the two positions of closure producing an annular space between the edge of the opening and a part of the head whose cross section is smaller than the diameter of the

opening, permitting delivery of the product contained in the container.

- 5      2.    The device as claimed in claim 1, characterized in that the elasticity of the diaphragm enables the body and the head to be returned to the rest position when the pressure on the walls of the container is removed.
- 10     3.    The device as claimed in either of claims 1 and 2, characterized in that the diaphragm is of an annular general shape of the same axis as the opening, bounded on its outer edge by the cylindrical part and on its inner edge by the  
15           cylindrical body.
- 20     4.    The device as claimed in claim 3, characterized in that, in the rest position, the diaphragm is in the general shape of a frustum of a cone, the apex of which points toward the center of the container.
- 25     5.    The device as claimed in either of claims 1 and 2, characterized in that the diaphragm comprises a cylindrical portion having undulations in the form of bellows able to exert pressure elastically to return the body and head to the rest position when the pressure on the walls of the container is removed.  
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- 35     6.    The device as claimed in one of claims 1-5 characterized in that the device is produced in elastomer as a single part.
7.    The device as claimed in one of claims 1-6, characterized in that the cylindrical part is crimped to the sealing lip or to the neck of the container.

8. The device as claimed in one of claims 1-6, characterized in that the device is built into a ring with a thread so that it can be screwed to the neck of the container.

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9. The device as claimed in one of claims 1-6, characterized in that the device is overmolded onto the sealing lip or onto the neck of the container.